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# NEVADA CLIMATE SUMMARY

Quarterly Summary  
April, May, June  
Volume 22, Numbers 4-6

## APRIL-JUNE CONDITIONS

By David Walker

### *Western Nevada*

April was primarily cool and unsettled because of a series of low-pressure systems moving through the area. The strongest of these occurred on the 8<sup>th</sup>-9<sup>th</sup> and the 18<sup>th</sup>-19<sup>th</sup>. Precipitation totals for the month were almost twice the normal but temperatures stayed near normal. It was windy in April with the maximum wind for the quarter on the 3<sup>rd</sup> at 55 mph.

The unsettled conditions persisted into May with cool and wet weather. Two high-pressure ridges dominated the region after one cool system on the 8<sup>th</sup>-12<sup>th</sup>. This caused temperatures for May to be 3.5°F above normal with the first 80°F mark on the 14<sup>th</sup>. Close to average precipitation was recorded for May but the warming brought about minor flooding from the snowmelt.

The flooding from snowmelt continued into June until a strong low-pressure system over the Pacific Northwest affected our area on the 6<sup>th</sup>. Gusty winds and highs only in the mid 50's to mid 60's resulted from this system and brought snow to places in the Sierra Nevada range. Mid-June saw a high-pressure system over the region with high temperatures in the upper 80's. The later part of the month saw more low-pressure systems bringing cooler unsettled weather to the area. Isolated thunderstorms, strong gusty wind over 50 mph, hail, heavy rain and flooding were recorded in Reno. June average temperature was slightly below normal with a range of 93°F to 36°F.

### *Eastern Nevada*

April was a month of variation for Eastern Nevada. Near normal temperatures was the average for the month but with large ranges. For example, Winnemucca had a high of 75°F and nine days later had a low of 19°F. Precipitation totals also ranged widely across the region. Ely had its 6<sup>th</sup> wettest April with 5.3" of precipitation which put in at 219% of normal. Winnemucca on the other hand had its 21<sup>st</sup> driest April. They were 44% of normal with .37" of precipitation.

April started with a weak high-pressure system over the area. Low-pressure systems still drove in to give the region some mountain snow and strong gusty winds. Mid-month saw cooler and drier conditions. Wet storms came in later in April to put down snow in the valleys.

The first half of May brought with it a series of strong Low-pressure systems. These Lows provided significant precipitation in the form of rain and snow. Many warnings and watches were issued from these storms and all were justified. The above average precipitation for the month came mostly before the 16<sup>th</sup> and was anywhere from 173% to 197% of normal. One storm on the 16<sup>th</sup> dropped 4.5" of snow in a valley near Ely.

The ground had been saturated this spring and so the precipitation mostly ran off into the rivers and streams filling them to the top of their banks and above. The latter part of the month experienced warmer and drier conditions causing increased

snowmelt. Because of this snowmelt there was flooding along the Humboldt River.

June saw below normal temperatures mostly in the first half of the month. The spring's unsettled weather ended and a weak high-pressure system persisted for most of the month. River and stream levels dropped and dry thunderstorms presented themselves for the last part of the month.

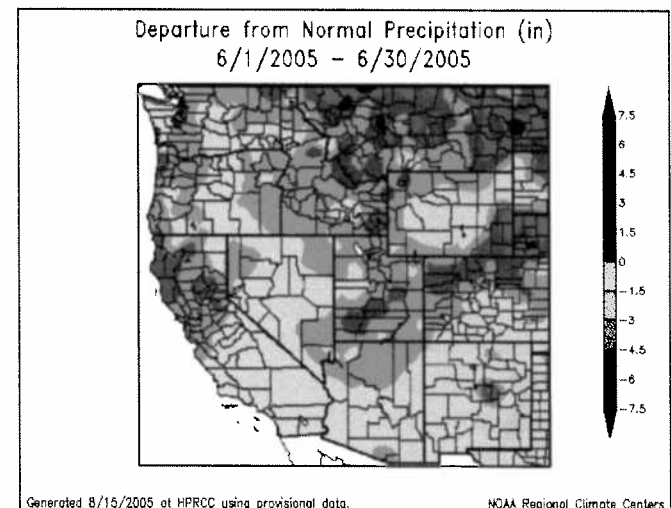
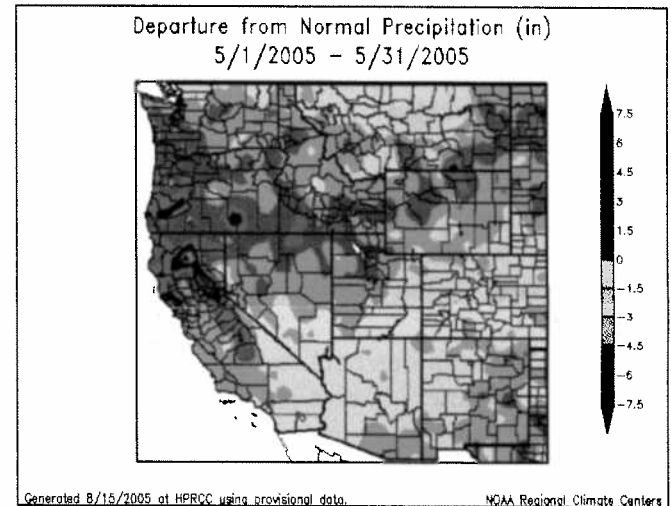
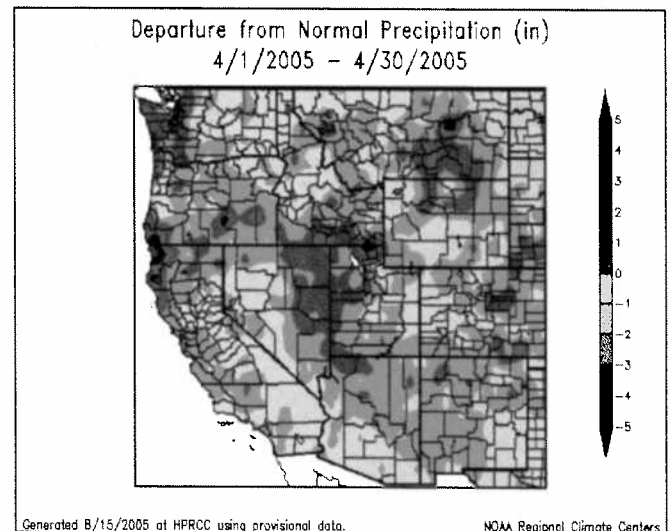
Even with the below normal temperatures Winnemucca had 90°F days for six of the last 11 days of the month. Measurable precipitation occurred only five days in June. Elko was slightly above average with .74" where the rest of the area was substantially below normal.

### ***Southern Nevada***

Southern Nevada experienced near normal temperatures and below normal precipitation for the month of April. Portions of Lincoln County had localized heavy rain from thunderstorms on the 23<sup>rd</sup>. Snow melting in the high country brought higher than normal stream flow in the Virgin and Muddy rivers.

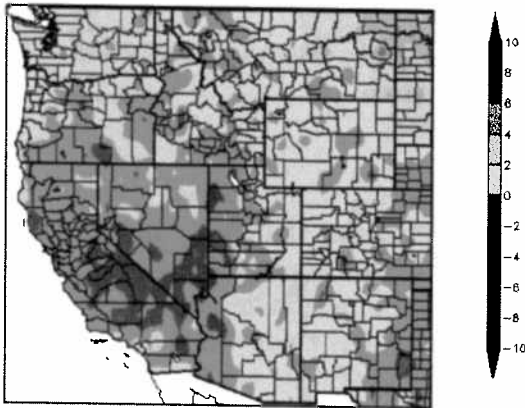
Rainfall for May was well below normal with only trace amounts reported for most of the area. The weather pattern was typical for this time of year however, with afternoon and evening thunderstorms in the first half of the month. The second half of the month saw temperatures well above normal from and strong high-pressure system over the region. This spawned the peak stream flow of the season for the Virgin River the last week and a half of May and on into the first two weeks of June. The Virgin River actually stayed above normal flow for the rest of June. This happened despite the below average precipitation for the month. Some stations in east central Nevada reported .5" to 1.25" from convective rainfall through the first part of June. Dry lightning on the 22<sup>nd</sup> caused numerous wildfires in Southern Nevada. Many of these fires grew quite large and were not contained by the end of the month.

### **Departures from normal precipitation**



## Departures from Normal Temperature

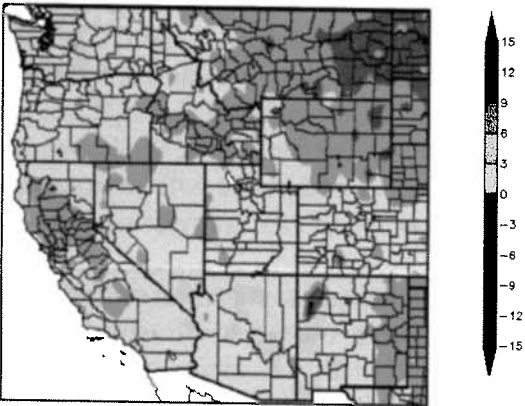
Departure from Normal Temperature (F)  
4/1/2005 - 4/30/2005



Generated 8/15/2005 at HPRCC using provisional data.

NOAA Regional Climate Centers

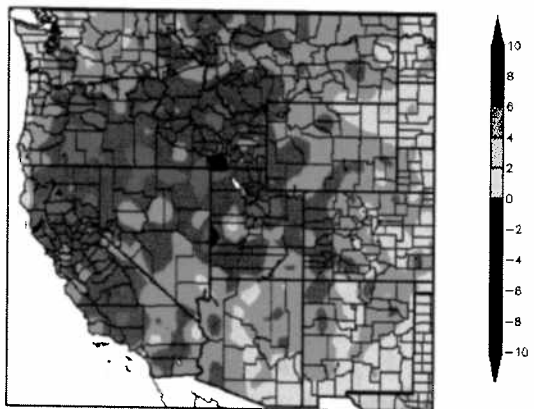
Departure from Normal Temperature (F)  
5/1/2005 - 5/31/2005



Generated 8/15/2005 at HPRCC using provisional data.

NOAA Regional Climate Centers

Departure from Normal Temperature (F)  
6/1/2005 - 6/30/2005



Generated 8/15/2005 at HPRCC using provisional data.

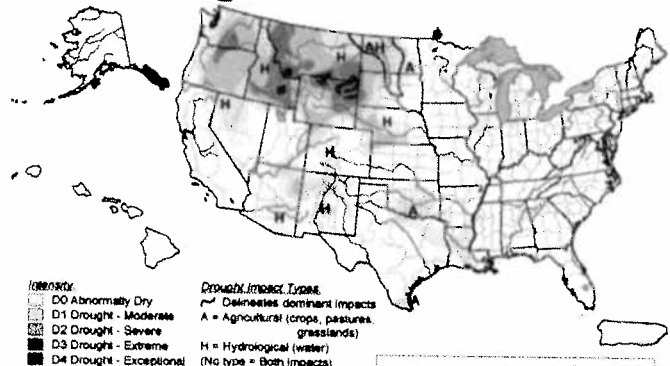
NOAA Regional Climate Centers

## DROUGHT OUTLOOK

Through the second quarter of the year the drought conditions improved all over the west. The whole of Nevada is now drought free.

### U.S. Drought Monitor

April 26, 2005  
Valid 8 a.m. EDT



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

Drought Impact Types:

- ~ Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)
- (No type = Both impacts)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

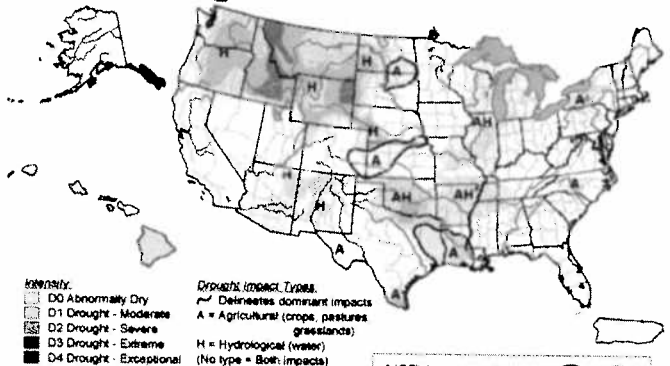
<http://drought.unl.edu/dm>



Released Thursday, April 28, 2005  
Author: Richard Tinker, NOAA/NWS/NCEP/CPC

### U.S. Drought Monitor

May 31, 2005  
Valid 8 a.m. EDT



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

Drought Impact Types:

- ~ Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)
- (No type = Both impacts)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

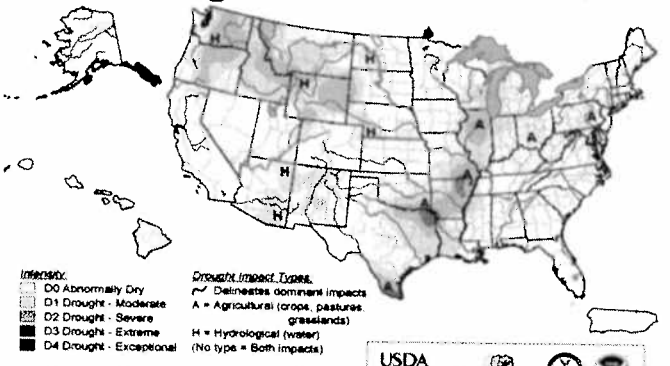
<http://drought.unl.edu/dm>



Released Thursday, June 2, 2005  
Author: Brad Rippey, U.S. Department of Agriculture

### U.S. Drought Monitor

June 28, 2005  
Valid 8 a.m. EDT



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

Drought Impact Types:

- ~ Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)
- (No type = Both impacts)

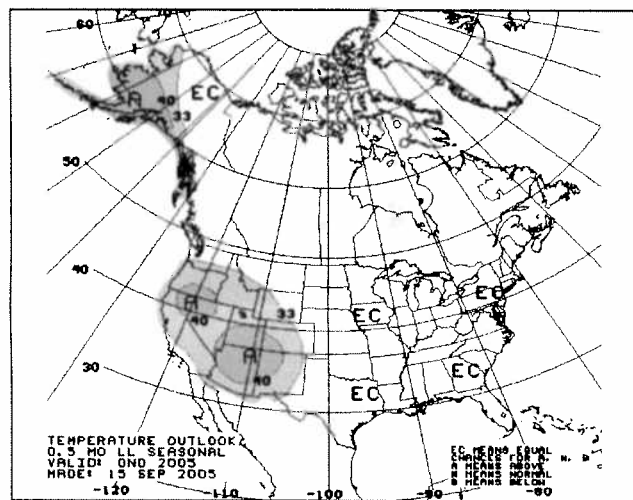
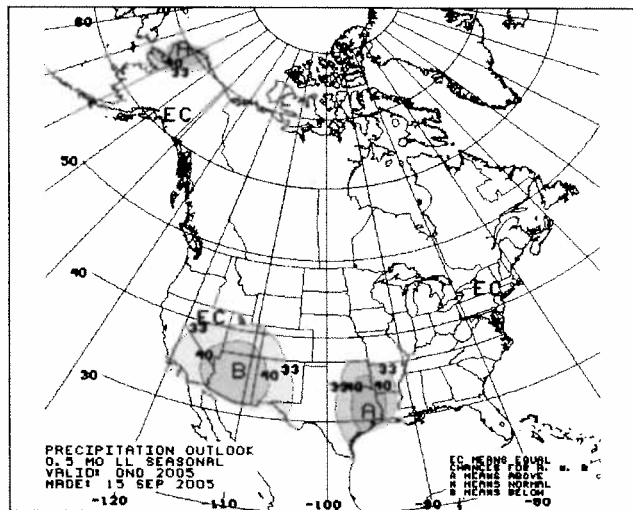
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://drought.unl.edu/dm>



Released Thursday, June 30, 2005  
Author: Douglas Le Comte, CPC/NOAA

**Official Seasonal Forecast  
October-December 2005  
From Climate Prediction Center**



## FEATURE ARTICLE

Over the next two years the Nevada State Climate Office will be undertaking a daunting project—locating and photo-documenting every weather observation station in the state. Many of these stations are part of the National Weather Service Cooperative Network and 40+ are part of the Nevada State Climate Office Network. We have however identified more than 500 stations operated by various agencies and individuals across Nevada. The completed project will consist of an online map and data base that will allow users to search for weather stations by region, elevation, and other parameters. During June and July two undergraduate students completed a pilot project in the Northwestern portion of Nevada. The information gathered during this pilot project is being used to define the methods and protocols for

the full project. This pilot project received coverage in the August 2005 issue of the University of Nevada magazine *Impact*. The article, written by John Wheeler is reproduced below.

### Tracking Down Nevada's Weather Infrastructure

By John Wheeler

They knew it would be tricky, trying to locate and document weather stations dotted around the northern Nevada countryside, but fending off bears? That wasn't in the job description state climatologist Jeff Underwood gave University senior John Lavin and his partner, Travis Douce. Nope. That job was better left to Plumas, Lavin's golden retriever.

"We had a bear about 50 feet away that my dog chased off," Lavin said with obvious pride in the affectionate canine parked at his feet.

At this drama unfolded in the Carson Range, just south of Washoe Valley, near Carson City. Lavin and Douce, a University of Georgia graduate, are spending their summer doing the legwork on a pilot project Underwood hopes will be expanded to greatly improve the accuracy of weather data collection in the state.

"We want to put together an online photo data base of Nevada's weather infrastructure," assistant geography professor Underwood said, noting that there are 500-700 weather stations dotted throughout Nevada. The problem: they're part of 24 different networks that are not linked, and not very well documented.

"You need highly accurate data for certain applications and you think you're getting it, but if you find that rainfall is actually being measured with a cup drilled into a telephone pole, that might not be the best data for the job," Underwood said. "You have to think of all the things that can affect how an instrument is sensing the weather."

And location is a big factor, as Underwood noted while gathering data in California.

"I was doing some research on fog and at some stations I would never get a westerly wind," he said. "When I looked at the photos online I could see that some of the stations were located with their west flank against large structures like barns, so they were shielded from westerly winds."

That's when Underwood realized the networks of weather stations had serious quality control defects—like the one located on the back patio of the Nevada Humane Society in Reno.

"Birds were coming in and storing their corn in the bottom of the rain gauge," Lavin said with a laugh.

Underwood plans to have the pilot project, which includes approximately 40 stations in northwestern Nevada, online for all to see by the middle of the fall semester. Underwood is currently preparing a National Science Foundation grant proposal and hopes to have upwards of 10 undergraduates working on the project over the next two summers.

**The project in a nutshell:**

- Locate and photo-document Nevada's 500-700 weather stations
- Include exact location coordinates and topographic maps, where possible
- List and describe the sensors operating at each site
- Consolidate all stations into a single online database, with still photographs and virtual panoramic views of each site
- Build an interactive Web interface that allows users to search the database for stations meeting criteria such as location, elevation, type of sensor, local vegetation type, and quality rating.
- Include a link to access data from cooperating agencies.



Photo by Jean Dixon

John Lavin, left, and Travis Douce spent their summer documenting weather stations in the northwest quadrant of the state—with help from Lavin's dog Plumas.

[**Note:** We apologize that the *Quarterly Summary* is so late getting to you. This office is un-staffed during the summer months. Also, we are in the process of making changes in the way we collate and manage the data sent to us from observers. We are now getting help from the Western Regional Climate Center to digitize the raw data for analysis. In transitioning raw data to WRCC a number of stations were left out of the digitizing process this quarter. These stations will be entered later.]

# STATISTICS FOR THE MONTH OF APRIL 2005

	Extreme High	Day	Extreme Low	Day	Average High	Average Low	Average Monthly Temp	Precip	Snowfall
<b>Climate Division 1 (NW)</b>									
Cold Springs	72	16	13	14	59	29	44	0.41	2.30
Dayton	m	m	m	m	m	m	m	m	m
Desert Valley (precip. only)	m	m	m	m	m	m	m	m	m
Fernley	m	m	m	m	m	m	m	m	m
Flanigan	m	m	m	m	m	m	m	m	m
Flying M Ranch	m	m	m	m	m	m	m	m	m
Gardnerville	m	m	m	m	m	m	m	m	m
Hay Creek	m	m	m	m	m	m	m	m	m
Hualapai	m	m	m	m	m	m	m	m	m
Jacks Valley	m	m	m	m	m	m	m	m	m
Lahontan Nat'l Fish Hatchery	m	m	m	m	m	m	m	m	m
Minden	74	16	20	14	62	32	47	0.66	1.50
Mogul	m	m	m	m	m	m	m	m	m
Reno 3WNW	m	m	m	m	m	m	m	m	m
Reno, N. Virginia	m	m	m	m	m	m	m	m	m
Sheridan Acres	m	m	m	m	m	m	m	m	m
Spanish Springs	73	16	20	14	60	31	45	0.50	0.00
Stillwater (Precip. only)	m	m	m	m	m	m	m	m	m
Sulphur	m	m	m	m	m	m	m	m	m
Washoe #10	m	m	m	m	m	m	m	m	m
Wellington	m	m	m	m	m	m	m	m	m
Wilson Canyon	m	m	m	m	m	m	m	m	m
Zephyr Cove	m	m	m	m	m	m	m	m	m
<b>Climate Division 2 (NE)</b>									
Jarbridge	m	m	m	m	m	m	m	m	m
Reese River	m	m	m	m	m	m	m	m	m
Ruby Valley	m	m	m	m	m	m	m	m	m
<b>Climate Division 3 (Central)</b>									
Belmont	m	m	m	m	m	m	m	m	m
Gabbs	m	m	m	m	m	m	m	m	m
Goldpoint	m	m	m	m	m	m	m	m	m
Manhattan	m	m	m	m	m	m	m	m	m
Marietta	m	m	m	m	m	m	m	m	m
Pioche - Lister Ranch	m	m	m	m	m	m	m	m	m
Schurz (precip. only)	m	m	m	m	m	m	m	m	m
Tonopah	m	m	m	m	m	m	m	m	m
<b>Climate Division 4 (S)</b>									
Boulder Beach	m	m	m	m	m	m	m	m	m
Las Vegas (NWS Station)	m	m	m	m	m	m	m	m	m
Lee Canyon	m	m	m	m	m	m	m	m	m
Overton Beach	m	m	m	m	m	m	m	m	m
Sandy Valley (precip. only)	m	m	m	m	m	m	m	m	m
<b>California Stations</b>									
Bare Ranch	m	m	m	m	m	m	m	m	m
Honey Lake Wildlife Refuge	m	m	m	m	m	m	m	m	m
Janesville, CA	m	m	m	m	m	m	m	m	m
Lake Tahoe - USCG	m	m	m	m	m	m	m	m	m
Truckee/Tahoe AP Dist., CA	m	m	m	m	m	m	m	m	m

\* - Incomplete data      m - Missing data  
nr - Not Recorded



# STATISTICS FOR THE MONTH OF MAY 2005

	Extreme High	Day	Extreme Low	Day	Average High	Average Low	Average Monthly Temp	Precip	Snowfall
<b>Climate Division 1 (NW)</b>									
Cold Springs	88	26	28	21	69	38	54	0.57	0.00
Dayton	m	m	m	m	m	m	m	m	m
Desert Valley (precip. only)	m	m	m	m	m	m	m	m	m
Fernley	m	m	m	m	m	m	m	m	m
Flanigan	m	m	m	m	m	m	m	m	m
Flying M Ranch	86	22, 23	32	11	72	44	58	1.28	0.00
Gardnerville	m	m	m	m	m	m	m	m	m
Hay Creek	m	m	m	m	m	m	m	m	m
Hualapai	m	m	m	m	m	m	m	m	m
Jacks Valley	87	26	34	11	71	45	58	1.11	0.00
Lahontan Nat'l Fish Hatchery	85	31	30	10	72	44	58	0.68	0.00
Minden	m	m	m	m	m	m	m	m	m
Mogul	m	m	m	m	m	m	m	m	m
Reno 3WNW	m	m	m	m	m	m	m	m	m
Reno, N. Virginia	92	25	37	9-11	75	46	60	0.42	0.00
Sheridan Acres	m	m	m	m	m	m	m	m	m
Spanish Springs	87	26	33	17	70	44	57	0.78	0.00
Stillwater (Precip. only)	m	m	m	m	m	m	m	m	m
Sulphur	m	m	m	m	m	m	m	m	m
Washoe #10	m	m	m	m	m	m	m	m	m
Wellington	m	m	m	m	m	m	m	m	m
Wilson Canyon	90	27	29	2	74	44	59	1.48	0.00
Zephyr Cove	m	m	m	m	m	m	m	m	m
<b>Climate Division 2 (NE)</b>									
Jarbridge	m	m	m	m	m	m	m	m	m
Reese River	m	m	m	m	m	m	m	m	m
Ruby Valley	80	21-23	32	2	69	40	54	1.93	0.00
<b>Climate Division 3 (Central)</b>									
Belmont	m	m	m	m	m	m	m	m	m
Gabbs	92	27,28	35	11,17	77	47	62	1.95	0.00
Goldpoint	m	m	m	m	m	m	m	m	m
Manhattan	m	m	m	m	m	m	m	m	m
Marietta	93	25	35	10	76	45	60	0.77	0.00
Pioche - Lister Ranch	m	m	m	m	m	m	m	m	m
Schurz (precip. only)	m	m	m	m	m	m	m	m	m
Tonopah	90	26	29	10	73	44	58	0.76	0.00
<b>Climate Division 4 (S)</b>									
Boulder Beach	109	24	58	7, 8	93	63	78	0.00	0.00
Las Vegas (NWS Station)	m	m	m	m	m	m	m	m	m
Lee Canyon	m	m	m	m	m	m	m	m	m
Overton Beach	m	m	m	m	m	m	m	m	m
Sandy Valley (precip. only)	m	m	m	m	m	m	m	m	m
<b>California Stations</b>									
Bare Ranch	m	m	m	m	m	m	m	m	m
Honey Lake Wildlife Refuge	m	m	m	m	m	m	m	m	m
Janesville, CA	m	m	m	m	m	m	m	m	m
Lake Tahoe - USCG	75	28	25	10	56	33	45	1.50	0.00
Truckee/Tahoe AP Dist., CA	84	27	25	10-11	61	32	47	2.15	1.00

\* - Incomplete data m - Missing data  
nr - Not Recorded

STATISTICS FOR THE MONTH OF JUNE 2005									
	Extreme High	Day	Extreme Low	Day	Average High	Average Low	Average Monthly Temp	Precip	Snowfall
<b>Climate Division 1 (NW)</b>									
Cold Springs	92	30	25	7	76	39	57	0.86	0.00
Dayton	m	m	m	m	m	m	m	m	m
Desert Valley (precip. only)	m	m	m	m	m	m	m	m	m
Fernley	99	30	35	7	82	52	67	0.61	0.00
Flanigan	97	30	33	7	81	47	64	0.35	0.00
Flying M Ranch	m	m	m	m	m	m	m	m	m
Gardnerville	92	30	27	7	79	42	60	0.11	0.00
Hay Creek	m	m	m	m	m	m	m	m	m
Hualapai	m	m	m	m	m	m	m	m	m
Jacks Valley	90	30	38	6	77	48	63	0.26	0.00
Lahontan Nat'l Fish Hatchery	m	m	m	m	m	m	m	m	m
Minden	94	30	28	7	79	44	62	0.11	0.00
Mogul	m	m	m	m	m	m	m	m	m
Reno 3WNW	m	m	m	m	m	m	m	m	m
Reno, N. Virginia	97	29	36	7	79	49	64	0.48	0.00
Sheridan Acres	92	30	32	7	79	45	62	0.23	0.00
Spanish Springs	92	30	32	7	78	46	62	0.65	0.00
Stillwater (Precip. only)	m	m	m	m	m	m	m	m	m
Sulphur	90	24,27,30	28	6	80	45	63	0.15	0.00
Washoe #10	85	22	31	7	76	46	61	0.29	0.00
Wellington	91	30	28	7	78	43	61	0.18	0.00
Wilson Canyon	93	22	30	7	81	46	64	0.17	0.00
Zephyr Cove	m	m	m	m	m	m	m	m	m
<b>Climate Division 2 (NE)</b>									
Jarbidge	86	21	29	1	69	38	53	2.02	0.80
Reese River	90	21	24	3	77	38	57	0.22	0.00
Ruby Valley	89	21	34	7	74	44	59	1.31	0.00
<b>Climate Division 3 (Central)</b>									
Belmont	85	30	26	7	71	41	56	0.05	0.00
Gabbs	100	22	38	7	86	51	69	0.16	0.00
Goldpoint	m	m	m	m	m	m	m	m	m
Manhattan	m	m	m	m	m	m	m	m	m
Marietta	97	30	35	8	85	49	67	0.25	0.00
Pioche - Lister Ranch	88	22	28	8	77	42	60	0.91	0.00
Schurz (precip. only)	m	m	m	m	m	m	m	m	m
Tonopah	m	m	m	m	m	m	m	m	m
<b>Climate Division 4 (S)</b>									
Boulder Beach	m	m	m	m	m	m	m	m	m
Las Vegas (NWS Station)	m	m	m	m	m	m	m	m	m
Lee Canyon	99	30	35	7	82	52	67	0.61	0.00
Overton Beach	m	m	m	m	m	m	m	m	m
Sandy Valley (precip. only)	m	m	m	m	m	m	m	m	m
<b>California Stations</b>									
Bare Ranch	m	m	m	m	m	m	m	m	m
Honey Lake Wildlife Refuge	m	m	m	m	m	m	m	m	m
Janesville, CA	88	30	36	7	77	50	63	1.16	0.00
Lake Tahoe - USCG	73	14	24	7	62	35	49	0.42	0.00
Truckee/Tahoe AP Dist., CA	86	30	23	7	70	36	53	0.81	0.00

\* - Incomplete data      m - Missing data  
nr - Not Recorded



**References:** Climate Prediction Center: [www.cpc.ncep.noaa.gov](http://www.cpc.ncep.noaa.gov)

US Drought Monitor: [www.drought.unl.edu/dm/monitor.html](http://www.drought.unl.edu/dm/monitor.html)

National Weather Service: <http://www.wrh.noaa.gov>

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